ARMY CITES OUTSTANDING R&D ORGANIZATIONS

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Introduction

Since 1975, the Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASAALT) (formerly the ASA for Research, Development and Acquisition) has presented annual Research and Development Organization (RDO) of the Year Awards to Army organizations in recognition of outstanding technical and managerial programs implemented during the preceding fiscal year. Specifically, RDO awards recognize the best research and development (R&D) programs and best-managed organizations that enhance the capability and readiness of Army operational forces and the national defense and welfare of the United States.

RDO laboratories play a key role in executing the Army vision and the Army Transformation Campaign Plan (TCP). The Army TCP will result in an Objective Force that is strategically responsive and capable of dominating at every point on the spectrum of operations. The objective of the TCP is an Army that is responsive, deployable, agile, versatile, lethal, survivable, and sustainable. The Army labs have stepped forward to meet the Army transformation objectives and operational challenges.

The Objective Force will capitalize on advances in science and technology (S&T) that will enable the operational force to be equipped with significantly advanced systems such as the Future Combat Systems (FCS), thus allowing greater responsiveness with overmatching combat power. The labs' technical programs are obviously very important to the readiness of the Army and to the safety and capabilities of the soldier. Army labs are challenged to remain on the cutting edge of S&T and to innovate in both the management and technical arenas to support the Army transformation. The Army's R&D organizations will continue to provide the Army the technical advantage in support of our nonnegotiable contract with the American people—fighting and winning our Nation's wars, when called.

Awards Ceremony

At an awards ceremony at the Pentagon Oct. 4, 2001, LTG Paul J. Kern, then Military Deputy to the ASAALT (now with his fourth star and Commanding General, U.S. Army Materiel Command), on behalf of then Acting ASAALT Dr. Kenneth J. Oscar, presented the annual awards to selected R&D organizations for FY00 achievements. The labs that were honored demonstrated a commitment to excellence both in their technical programs and in the management of their organizations.

The 2001 RDO Award recipients were selected by an evaluation committee chaired by Dr. Walter F. Morrison, Director for Research and Laboratory Management, Office of the ASAALT, and composed of highly qualified members from the Army and DOD S&T communities. The committee evaluated both written nominations from each organization's major command and verbal presentations from each organization's director. Organization rankings were based on accomplishments and impacts; organizational vision, strategy, and plans; resource management; and continuous improvement.

Based on the review of accomplishments, the evaluation committee selected two 2001 RDO of the Year Award recipients, one in the Large Laboratory Category (600 employees or more) and one in the Small Laboratory Category (less than 600 employees).

Additionally, the evaluation committee selected two organizations (one large and one small) for Army 2001 RDO Excellence Awards in recognition of FY00 research accomplishments.

Large Lab RDO Of The Year

The winner of the 2001 RDO of the Year Award in the Large Laboratory Category was the U.S. Army Aviation and Missile Research, Development and Engineering Center (AMRDEC), Redstone Arsenal, AL.

AMRDEC's mission is to provide technical services to a variety of customers and to conduct scientific R&D in the disciplines that support their customers. AMRDEC's personnel are among the world's premier aviation and missile technologists. AMRDEC has repeatedly proven its abilities by demonstrating affordable solutions to overcome critical technical barriers in customer programs.

During FY00, AMRDEC focused on enhancing the capabilities of the U.S. Army to make the pre-eminent warfighting force in the world even more lethal, survivable, flexible, deployable, and affordable while reducing its logistical footprint. AMRDEC had many outstanding accomplishments during the year. Most noteworthy was development of the Counter Active Protection System (CAPS), which defeats threat armor equipped with active protection systems. The application of CAPS technology restores the lethality of the U.S. antiarmor inventory and saves billions of dollars.

AMRDEC was also recognized for its outstanding milestone in achieving the Carnegie Mellon University Software Engineering Institute "Capability Maturity Level 4" certification for software engineering processes. AMRDEC is the only Army organization to achieve a Capability Maturity Level 4 certification and is one of only five government organizations to reach this level. This achievement will help ensure reliable and robust software for the soldier, produced in less time and at lower cost.

Also noteworthy was AMRDEC's S&T Personnel Demonstration, which has proven successful in recruiting, retention, and career development of the workforce. In addition, the S&T Personnel Demo resulted in reduced grievances and accelerated action approvals and decisions.

Small Lab RDO Of The Year

The recipient of the 2001 RDO of the Year Award in the Small Laboratory Category was the U.S. Army Natick Soldier Systems Center, Natick, MA.

The center's mission is to conduct research, development, testing, and evaluation to maximize the soldier's

survivability, sustainability, mobility, combat effectiveness, and quality of life by treating the soldier as a system. By applying cutting-edge technology, state-of-the-art equipment and facilities, partnerships with the private sector (industry and academia), and a disciplined and inclusive customer focus, the center made significant advances in developing individual-warrior-related technologies and warrior systems. The center's 28 patents and invention disclosures in FY00 indicate that center personnel are innovative and focused on technology that is both revolutionary and relevant to the military.

Among the center's notable FY00 accomplishments was the Military Operations on Urbanized Terrain (MOUT) Advanced Concept Technology Demonstration (ACTD). This project evaluates advanced technologies to provide operational dominance in MOUT to Army and U.S. Marine Corps forces. It also integrates technology; training; and tactics, techniques, and procedures, and has produced operational capabilities used by Army and Marine Corps units.

The center was judged outstanding for the implementation of its 5-year human resources (HR) strategic plan dealing with manpower assessment, hiring, training and skills, retention, and improved HR processes. The center aggressively pursues outreach programs as part of its overall workforce recruitment strategy. This includes partnerships with Historically Black Colleges and Universities (HBCUs), recruiting promising candidates under the DA Career Related Experience in Science and Technology Program scholarship, and advertising scientific and engineering opportunities at the center.

During FY00, the center also transitioned an impressive number of high-payoff technologies and products to multiple customers. These include the MOUT ACTD, Interceptor Body Armor and Small Arms Protective Insert, Near-Infrared Modifier Technology, and the Interagency Emergency Communications System.

Army RDO Award ceremony attendees shown left to right are Dr. James Houston, Director, ERDC; Dr. Walter F. Morrison, Director for Research and Laboratory Management, Office of the ASAALT; Philip Brandler, Director, Natick Soldier Systems Center; Dr. William C. McCorkle, Director, AMRDEC; LTG Paul J. Kern, then Military Deputy to the ASAALT (now with his fourth star and Commanding General, U.S. Army Materiel Command); and Dr. Edgar Johnson, Director, ARI.

Large Lab Excellence

The recipient of the 2001 RDO Award for Excellence in the Large Laboratory Category was the U.S. Army Corps of Engineers Engineer R&D Center (ERDC), Waterways Experiment Station, Vicksburg, MS.

ERDC is one of the most diverse engineering and scientific research organizations in the world, combining all Corps of Engineers R&D operations into one organization. ERDC provides quality R&D solutions to the Army and to the Nation. Research at ERDC results in products related to mapping and terrain analysis; infrastructure design, construction, operations, and maintenance; structural engineering; cold regions and ice engineering; and coastal and hydraulics engineering.

ERDC's major FY00 accomplishments included excellence in modeling vehicle-specific seismic signatures. This project resulted in development of state-of-the-art physics models for vehicle/ground interaction and 3-D seismic propagation that enable ground sensors to identify and target vehicles. This breakthrough technology directly supports futuristic tactical sensor systems including the Raptor Intelligent Combat Outpost, antipersonnel landmine alternatives, and advanced sensor networks envisioned for the FCS and Objective Force. ERDC was also recognized for technical excellence for its tele-engineering concept that provides deployed engineers rapid access to subject matter experts, knowledge databases, and private-sector and academic expertise. ERDC was also cited for its excellent outreach programs, especially with HBCUs.

Small Lab Excellence

The recipient of the 2001 RDO Award for Excellence in the Small Laboratory Category was the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI), Alexandria, VA.

ARI's mission is to maximize individual and unit performance and readiness to meet the full range of worldwide Army requirements through advances in the behavioral and social sciences. ARI is the primary Army laboratory that investigates the human dimension of warfighting.

ARI's technical accomplishments included development and implementation of the innovative Think Like a Commander training. Think Like a Commander is a Command and General Staff College (CGSC) effort designed to improve battlefield thinking skills through deliberate practice of expert patterns of thought in a variety of conflict situations. This training was a coordinated development effort with the U.S. Army Training and Doctrine Command (TRADOC) and CGSC. This represents a shift from procedural training to cognitive skill development. ARI adapted the learning theory of Think Like a Commander for use in other TRADOC schools and developed a leader's guide on how to implement this type of training. These activities directly support the Army's transformation to the FCS and Objective Force.

ARI was also recognized for its excellent exploitation of information-age technology and the World Wide Web to enhance access to ARI's products and ongoing research, and for providing quick and innovative methods for interactive data collection.

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